IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:	Confirmation No. 8432
CHENG et al.	Examiner: Ian D. Dang
Application No.: 10/512,124	Technology Center/Art Unit: 1647
Filed: August 26, 2005	Declaration under 37 C.F.R. ? .132
For: METHODS FOR STIMULATING TLR/IRF3 PATHWAYS FOR INDUCING ANTI-MICROBIAL, ANTI-INFLAMMATORY AND ANTICANCER RESPONSES	
Customer No.: 20350	

Sir:

I. Genhong Cheng, Ph.D., being duly warned that willful false statements and the like are punishable by fine or imprisonment or both (18 U.S.C. ? 1001), and may jeopardize the validity of the patent application or any patent issuing thereon, state and declare as follows:

1. All statements herein made of my own knowledge are true, and statements made on information or belief are believed to be true and correct.

2. I am a named co-inventor of the above referenced application and a Professor in the Department of Microbiology, Immunology, and Molecular Genetics at UCLA.

3. I understand that the Examiner has raised a concern regarding the enablement of the claimed methods *in vivo*. In order to demonstrate the enablement of the presently claimed subject matter *in vivo*, I now provide additional experimental data bearing on the ability of treatments with poly I:C to inhibit viral infection in mammals *in vivo*. All the work described herein were either conducted by me, at my direction, or by my colleagues who work with me as part of the team of scientists working on this project.

4. Exhibit A reports on the therapeutic effects of poly I:C treatment on prior MHV68 (*Murid herpesvirus 68)* infection in mice in vivo. MHV-68 often serves as a model for study of

human gamma herpes viruses which cause significant human disease. Here, we used a virus which was modified to recombinantly express luciferase which would serve as a readily quantifiable marker for viral infection. In our experiments, we administered the recombinant MHV68 virus to mice intratracheally and at both 24 hours and 48 hours later administered control (saline) or experimental treatments (100 ug poly I:C) to the mice. Five days later, we sacrificed the mice and measured their lung luciferase activities. As judged by the luciferase assay, the experimental treatment with poly I:C greatly reduced the level of lung infection.

5. Exhibit B reports on the *in vivo* prophylactic activity of poly I:C treatment in mice subsequently administered the recombinant luciferase-expressing MHV68 virus. We administered saline or poly I:C or saline to the mice and 24 hours later administered an intratracheal dose of the recombinant MHV68 virus to them. Five days after we administered the virus, we sacrificed the mice and measured the luciferase activity in their lung tissue. As above, the luciferase serves as a marker of infection. Accordingly, as compared to a control (saline) group, prior administration of poly I:C to the mice greatly reduced the level of infection in mice administered a challenge dose of MHV68.

6. The declarant has nothing further to say.

Respectfully submitted,

Genhong Cheng

1/26/2010
Date

62420248_1.DOC

Exhibit A

Therapeutic affect of pIC treatment on MHV68 infection

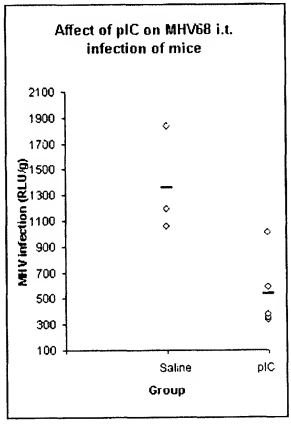

Figure 1: Animals were anesthetized and infected intratracheally with 2.5e4 (25,000) plaque forming units of MHV68 (M3CL). After 24 and 48 hours, animals were treated with 0.1cc of saline or 100µg pIC diluted in 0.1cc saline as indicated. Five days after infection, the lungs were harvested and level of infection assessed by Luciferase assay. Figure shows average luciferase activity for individual animals. Mean value indicated by the horizontal line.

Exhibit B

Prophylactic affect of pIC treatment on MHV68 infection

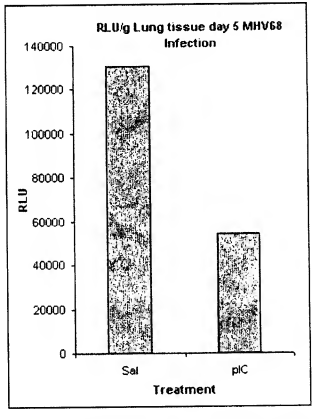

Figure 2: Animals were treated with 0.1cc of saline or 100µg pIC diluted in 0.1cc saline as indicated. 24 hrs later, all mice were infected intranasally with 5,000 pfu of MHV68 (M3CL). Five days after infection, the lungs were harvested and level of infection assessed by Luciferase assay. Figure 2 shows average luciferase activity for groups of four animals.